



1FW

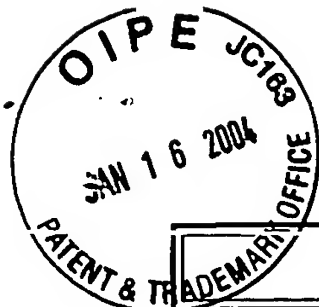
Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
USPTO Use Only

EFS ID: 53822  
Application ID: 10720805  
Title of Invention: POWERED SOIL TILLAGE DEVICE  
First Named Inventor: LAWRENCE ZACH  
Domestic/Foreign Application: Domestic Application  
Filing Date: 2003-11-24  
Effective Receipt Date: 2004-01-16  
Submission Type: Information Disclosure  
Statement  
Filing Type:  
Confirmation number: 5431  
Attorney Docket Number: NONE



Total Fees Authorized:


Digital Certificate Holder: cn=Dennis L. Thomte,ou=Registered Attorneys,ou=Patent and  
Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US  
Certificate Message Digest: c9f95a7494fdb12121f944fd07707e71e27a180d

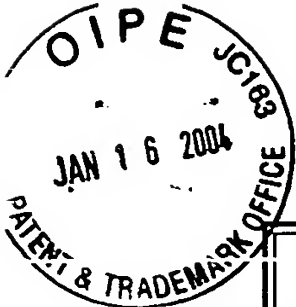


## TRANSMITTAL

Electronic Version v1.1

Stylesheet Version v1.1.0

|  |   |                |
|--|---|----------------|
| Title of Invention   | POWERED SOIL TILLAGE DEVICE                             |                |
| Application Number: 10/720805   |   |                |
| Date: 2003-11-24   |   |                |
| First Named Applicant: LAWRENCE J. ZACH  |   |                |
| Confirmation Number: 5431  |   |                |
| Attorney Docket Number:  |   |                |
| <p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p> |   |                |
| Submitted by:  | Elec. Sign.   | Sign. Capacity |
| DENNIS L. THOMTE<br>Registered Number: 22,497  | Dennis L. Thomte  | Inventor       |
| Documents being submitted<br>us-ids  | Files<br>zach805-usidst.xml<br>us-ids.dtd<br>us-ids.xsl |                |
| Comments   |   |                |



## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| Title of Invention   | POWERED SOIL TILLAGE DEVICE |            |            |            |      |       |          |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|--|-----------------------------|------------|------------|------------|------|-------|----------|------|----------|------------|------|----------|------|-------|----------|--|---|---------|------------|-------|--|-----|----|--|---|---------|------------|--------|--|-----|----|--|---|---------|------------|--------|--|-----|----|--|---|---------|------------|--------|--|-----|----|--|---|---------|------------|-------|--|-----|----|--|---|---------|------------|----------|--|-----|----|--|---|---------|------------|------------|--|-----|----|--|---|---------|------------|-------|--|-----|----|--|---|---------|------------|-------|--|-----|----|--|----|---------|------------|-----------|--|-----|----|--|----|---------|------------|-----------|--|-----|----|--|----|---------|------------|-----------|--|-----|----|--|----|---------|------------|--------|--|-----|----|--|----|---------|------------|-------|--|-----|----|
| <div>Application Number: 10/720805</div> <div>Confirmation Number: 5431</div> <div>First Named Applicant: LAWRENCE ZACH</div> <div>Attorney Docket Number:</div> <div>Search string: ( 5988290 or 5172768 or 4811794 or 4541492 or 4096915 or 3710870 or 3057412 or 2604833 or 2580936 or 2550522 or 1827074 or 1743195 or 1624610 or 0287248 ).pn.</div> <div>US Patent Documents</div> <div>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</div> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td></td><td>1</td><td>5988290</td><td>1999-11-23</td><td>BANKS</td><td></td><td>172</td><td>21</td></tr><tr><td></td><td>2</td><td>5172768</td><td>1992-12-22</td><td>STRAUS</td><td></td><td>172</td><td>89</td></tr><tr><td></td><td>3</td><td>4811794</td><td>1989-03-14</td><td>GREENE</td><td></td><td>172</td><td>43</td></tr><tr><td></td><td>4</td><td>4541492</td><td>1985-09-17</td><td>MOTRUK</td><td></td><td>172</td><td>41</td></tr><tr><td></td><td>5</td><td>4096915</td><td>1978-06-27</td><td>GROTH</td><td></td><td>172</td><td>42</td></tr><tr><td></td><td>6</td><td>3710870</td><td>1973-01-16</td><td>PFEIFFER</td><td></td><td>172</td><td>40</td></tr><tr><td></td><td>7</td><td>3057412</td><td>1962-10-09</td><td>HOVIS, JR.</td><td></td><td>172</td><td>42</td></tr><tr><td></td><td>8</td><td>2604833</td><td>1952-01-29</td><td>LYTLE</td><td></td><td>172</td><td>84</td></tr><tr><td></td><td>9</td><td>2580936</td><td>1952-01-01</td><td>LYTLE</td><td></td><td>172</td><td>42</td></tr><tr><td></td><td>10</td><td>2550522</td><td>1951-04-24</td><td>BOLONGARO</td><td></td><td>172</td><td>40</td></tr><tr><td></td><td>11</td><td>1827074</td><td>1931-10-13</td><td>DITLEVSEN</td><td></td><td>172</td><td>41</td></tr><tr><td></td><td>12</td><td>1743195</td><td>1930-01-14</td><td>DITLEVSEN</td><td></td><td>172</td><td>41</td></tr><tr><td></td><td>13</td><td>1624610</td><td>1927-04-12</td><td>MATSON</td><td></td><td>172</td><td>84</td></tr><tr><td></td><td>14</td><td>0287248</td><td>1883-10-23</td><td>COYLE</td><td></td><td>172</td><td>84</td></tr></tbody></table> <div>Signature</div> <div></div> |                             |            |            |            |      |       |          | init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass |  | 1 | 5988290 | 1999-11-23 | BANKS |  | 172 | 21 |  | 2 | 5172768 | 1992-12-22 | STRAUS |  | 172 | 89 |  | 3 | 4811794 | 1989-03-14 | GREENE |  | 172 | 43 |  | 4 | 4541492 | 1985-09-17 | MOTRUK |  | 172 | 41 |  | 5 | 4096915 | 1978-06-27 | GROTH |  | 172 | 42 |  | 6 | 3710870 | 1973-01-16 | PFEIFFER |  | 172 | 40 |  | 7 | 3057412 | 1962-10-09 | HOVIS, JR. |  | 172 | 42 |  | 8 | 2604833 | 1952-01-29 | LYTLE |  | 172 | 84 |  | 9 | 2580936 | 1952-01-01 | LYTLE |  | 172 | 42 |  | 10 | 2550522 | 1951-04-24 | BOLONGARO |  | 172 | 40 |  | 11 | 1827074 | 1931-10-13 | DITLEVSEN |  | 172 | 41 |  | 12 | 1743195 | 1930-01-14 | DITLEVSEN |  | 172 | 41 |  | 13 | 1624610 | 1927-04-12 | MATSON |  | 172 | 84 |  | 14 | 0287248 | 1883-10-23 | COYLE |  | 172 | 84 |
| init   | Cite.No.                    | Patent No. | Date       | Patentee   | Kind | Class | Subclass |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 1                           | 5988290    | 1999-11-23 | BANKS      |      | 172   | 21       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 2                           | 5172768    | 1992-12-22 | STRAUS     |      | 172   | 89       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 3                           | 4811794    | 1989-03-14 | GREENE     |      | 172   | 43       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 4                           | 4541492    | 1985-09-17 | MOTRUK     |      | 172   | 41       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 5                           | 4096915    | 1978-06-27 | GROTH      |      | 172   | 42       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 6                           | 3710870    | 1973-01-16 | PFEIFFER   |      | 172   | 40       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 7                           | 3057412    | 1962-10-09 | HOVIS, JR. |      | 172   | 42       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 8                           | 2604833    | 1952-01-29 | LYTLE      |      | 172   | 84       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 9                           | 2580936    | 1952-01-01 | LYTLE      |      | 172   | 42       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 10                          | 2550522    | 1951-04-24 | BOLONGARO  |      | 172   | 40       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 11                          | 1827074    | 1931-10-13 | DITLEVSEN  |      | 172   | 41       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 12                          | 1743195    | 1930-01-14 | DITLEVSEN  |      | 172   | 41       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 13                          | 1624610    | 1927-04-12 | MATSON     |      | 172   | 84       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |
|  | 14                          | 0287248    | 1883-10-23 | COYLE      |      | 172   | 84       |      |          |            |      |          |      |       |          |  |   |         |            |       |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |        |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |          |  |     |    |  |   |         |            |            |  |     |    |  |   |         |            |       |  |     |    |  |   |         |            |       |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |           |  |     |    |  |    |         |            |        |  |     |    |  |    |         |            |       |  |     |    |

| Examiner Name | Date |
|---------------|------|
|               |      |